

1 WHAT IS CLAIMED IS:

2 1. A system for wireless interaction between an operator and
3 a program, comprising:

4 a host device for supporting the program;

5 a base transceiver engaged with said host device, wherein
6 said base transceiver comprises a processor core, a radio
7 frequency transceiver, and voice recognition and generation
8 capability; and

9 a controller operable by the operator, wherein said
10 controller comprises a processor core, a radio frequency
11 transceiver for wireless communication with said base transceiver
12 radio frequency transceiver, and an audio input and output
13 interface.

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15 2. A system as recited in Claim 1, wherein at least two
16 controllers are in radio frequency transmission with said base
17 transceiver.

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19 3. A system as recited in Claim 2, wherein said base
20 transceiver is capable of selectively transmitting an audio signal
21 to at least one of said controllers.

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23 4. A system as recited in Claim 2, wherein said base
24 transceiver is capable of receiving multiple audio signals from at
25 least one source, and wherein said base transceiver is further
26 capable of mixing said audio signals for transmission to said
27 controllers.

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29 5. A system as recited in Claim 4, wherein said base
30 transceiver is capable of selectively transmitting said audio
31 signals to at least one selected controller.

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33 6. A system as recited in Claim 5, wherein said base receiver
34 is capable of selectively configuring a set of said audio signals
35 for transmission to at least one selected controller.

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37 7. A system as recited in Claim 2, wherein said host device
38 is capable of being programmed to generate targeted audio signals
39 transmitted to at least one of said controllers.

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41 8. A system as recited in Claim 1, wherein said base
42 transceiver is capable of generating audio signals for
43 transmission to at least one of said controllers.

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44 9. A system as recited in Claim 5, wherein the audio signal
45 for a given controller without audio capability is redirected to
46 an audio RF transceiver by said base transceiver, where said base
47 transceiver logically associates said controller and said audio RF
48 transceiver as an integrated device.

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50 10. A system as recited in Claim 1, wherein said voice
51 recognition and command control capability comprises the
52 capability of blending controller inputs, pre-defined keyboard and
53 controller voice commands and user-defined voice commands.

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55 11. A system as recited in Claim 10, wherein said voice
56 recognition capabilities have pre-defined voice commands tailored
57 to a selected application.

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59 12. A system as recited in claim 10, wherein said voice
60 command is composed of command identifier and command action
61 parts.

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63 13. A system as recited in Claim 12, wherein the command
64 identifier field is a combination of voice signals and controller
65 key presses.

67 14. A system as recited in Claim 12, wherein the command
68 action field is a combination of voice signals and controller key
69 presses.
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71 15. A system as recited in Claim 10, wherein said voice
72 commands and voice signals are capable of being stored in memory
73 and are capable of being transferred from said memory.
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75 16. A system as recited in Claim 10, wherein said voice
76 commands are organized into voice-tagged profiles of voice command
77 sets.
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79 17. A system as recited in Claim 16, wherein said voice
80 command profile resident in said base transceiver is activatable
81 for a selected controller so that the voice command capability set
82 of the profile is accessible to said controller.
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84 18. A system as recited in Claim 16, wherein said voice
85 profile can be uploaded to a controller from a first base
86 transceiver and then downloaded to a second base transceiver.
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88 19. A system as recited in Claim 18, wherein a profile
89 downloaded to a second base transceiver from a controller may be
90 activated by a controller associated with said second base
91 transceiver so that the voice command capability set of said
92 profile is accessible to any second base transceiver controller.

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94 20. A system as recited in Claim 10, wherein one or more
95 controller input or keyboard input sequences can be initiated by a
96 voice command.

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98 21. A system as recited in Claim 10, wherein one or more
99 controller input or keyboard input sequences can be initiated by a
100 voice command in combination with a controller key sequence.

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102 22. A system as recited in Claim 1, further comprising an
103 audio telecommunication session supported when said resident host
104 device application is paused until such session has completed.

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106 23. A system as recited in Claim 1 wherein said voice
107 recognition and generation capability is at least partially
108 resident in said host device and said base transceiver manages the
109 transfer of audio signals and voice recognition parameters to and
110 from said host device.

112 24. A system as recited in Claim 1, wherein selected
113 functions of said base transceiver are integrated into said host
114 device.

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116 25. A system as recited in Claim 1, further comprising an
117 environmental noise cancellation mechanism.

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119 26. A system as recited in Claim 1, further comprising a hard
120 wire connection between said controller and said base transceiver.

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122 27. A system as recited in Claim 10 further comprising a
123 hard wire connection between said controller and said base
124 transceiver for facilitating said voice recognition and command
125 control capability.